+

MI 10 67 HE 10 67 HE 10/95

-0001/PTO Rev. 10/95			Applic	catio	on Number	10/765,578			
			Filing	Da	te	January 20	5, 2004	\$	
TRANSMITTAL FORM			First I	Nan	ned Inventor	Robert A. York			
	orrespondence during pe iled application)	endency of	Group	p Ar	t Unit Number	2811			_
	•		Exam	nine	r Name	Not yet known			
Total Number of Pag	ges in This Submission	6	Attorr	ney	Docket Number	22994-087	91		
	ENCL	OSURES	(che	eck	all that apply	<i>'</i>)			
Che Return Receipt Response to Not Assignment & Fower of Attorn Application Dat Information Dis Request for Co Request for Co Amendment/Ret Status Request	otice to File Missing Part Recordation Cover Shee ney a Sheet closure Statement & PT es of IDS Cited Reference rected Filing Receipt rrection of Recorded Assesponse: [] Page(s)	ot FO/SB/08A ces signment			Issue Fee Transi Letter to Chief Di Formal Drawing([] Sheet(s Appeal Commun Interferences Appeal Commun (Appeal Notice, Certified Copy of After Allowance (raftsperson s): s) of Figure(s) [illication to Board illication to Group Brief, Reply Brief Priority Documents	d of App p ef) ent(s)		and
REMARKS:							_		
	√SICŊV.	TURE OF	ΔΤΤΟ)RI	NEY OR AGE	NT.			
Signature:	11. 1.20 1.1			<i>-</i> 1 \ 1	TE ON AGE				
Attorney/Reg. No.: Michael W. Farn, Reg. No. 41,01			5			Dated:	May	7_	, 2004
		CERTIFIC							
first class mail in an env the date shown below. I	I hereby certify that this correspondence, including the enclosures identified above, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. If the Express Mail Mailing Number is filled in below, then this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service pursuant to 37 CFR 1.10.								
Signature:	Signature: Mubaek)								
Typed or Printed Na	me: Michael W. Far	'n				Dated:	May	5	, 2004
Express Mail Mailing Number (optional):									

O MAT O TOTAL STATE OF THE PROPERTY OF THE PRO

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

711) DICHINI.

Robert A. York

APPLICATION NO.:

10/765,578

FILING DATE:

January 26, 2004

TITLE:

Voltage-Variable Capacitor with Increased Current Conducting

Perimeter

EXAMINER:

Not yet known

GROUP ART UNIT:

2811

ATTY. DKT. NO.:

22994-08791

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

the date shown below:

Dated: May

5

, 2004

By: Mich

Michael W. Farn, Reg. No. 41,015

MAIL STOP AMENDMENT COMMISSIONER FOR PATENTS P.O. BOX 1450 ALEXANDRIA, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT Under 37 CFR §§ 1.56 and 1.97-98

SIR:

Pursuant to the provisions of 37 CFR §§ 1.56 and 1.97-98, enclosed herewith is modified form PTO/SB/08A listing references for consideration by the Examiner.

The filing of this Information Disclosure Statement shall not be construed as a representation regarding the completeness of the list of references, or that inclusion of a reference in this list is an admission that it is prior art or is pertinent to this application, or that a search has been made, or as an admission that the information listed is, or may be considered to be, material to patentability, or that no other material information exists, and shall not be construed as an admission against interest in any manner.

This Information Disclosure Statement is being filed:

within three months of the filing date of the application, or date of entry into the national stage of an international application, or before the mailing date of a first office action on the merits, whichever event last occurred;

		ling of a first official action after the filing of a request for
		mination (RCE) under 37 CFR § 1.114;
		nths of the filing date of this national application or the date
	•	national stage in an international application, or after the
mailin	g date o	f the first official action on the merits, whichever event last
occurr	ed, but l	before the mailing date of the first to occur of either: (1) a
final a	ction un	ider 37 CFR §1.113; or (2) an action that otherwise closes
prosec	ution in	the application, and:
	attach	ed hereto is the fee set forth under 37 CFR §1.17(p) for
	subm	ission of this Information Disclosure Statement under 37
	CFR.	§ 1.97(c); OR
	Appli	cant certifies pursuant to 37 CFR § 1.97(e) that:
		each item of information contained in this Information
		Disclosure Statement was first cited in a communication
		from a foreign patent office in a counterpart foreign
		application not more than three months prior to the filing of
		this Statement; OR
		no item of information contained in this Information
		Disclosure Statement was cited in a communication from a
		foreign patent office in a counterpart foreign application
		and, to the knowledge of the person signing this
		certification after making reasonable inquiry, no item of
		information contained in this Statement was known to any
		individual designated under 37 CFR § 1.56(c) more than
		three months prior to the filing of this Statement;
on or	before	the payment of the issue fee but after the mailing date of the
		of either: (1) a final action under 37 CFR § 1.113; (2) a
		owance under 37 CFR § 1.311; or (3) an action that otherwise
		cution in the application, and:
	Appli	icant certifies pursuant to 37 CFR. § 1.97(e) that:
_		each item of information contained in this Information
	_	Disclosure Statement was cited in a communication from a
		foreign patent office in a counterpart foreign application not
		more than three months prior to the filing of this Statement;
		or ·
		no item of information contained in this Information
•	_	Disclosure Statement was cited in a communication from a

				i	foreign patent office in a counterpart foreign application
				ä	and, to the knowledge of the person signing this
				·	certification after making reasonable inquiry, no item of
				i	information contained in this Statement was known to any
				i	individual designated under 37 CFR § 1.56(c) more than
				1	three months prior to the filing of this Statement; AND
				attached	d hereto is the fee set forth under 37 CFR §1.17(p) for
				submiss	sion of this Information Disclosure Statement under 37
				CFR.§	1.97(c); OR
			after tl	ne payme	ent of the issue fee. Applicant requests that the information
			contai	ned in thi	is Information Disclosure Statement be placed in the file
			accord	ling to 37	7 CFR § 1.97(i), although the information may not be
			consid	lered by t	the USPTO.
	\boxtimes	This a	pplicati	on relies,	, under 35 U.S.C. § 120, on the earlier filing date of prior
		applica	ation N	o. 10/144	4,185, filed on May 10, 2002, and the references cited
		thereir	are he	reby refe	erenced, but are not required to be provided in this
		applica	ation ur	nder 37 C	CFR § 1.98(d).
		Each i	tem of i	informati	ion contained in this Information Disclosure Statement was
		cited in	n a com	municati	ion from a foreign patent office in a counterpart application,
		and the	e comm	unication	n was not received by any individual designated in 37 CFR
		§ 1.56	(c) mor	e than thi	irty days prior to the filing of this Information Disclosure
		Statem	nent. 37	7 CFR §	1.704(d).
	\boxtimes	Applic	ant sub	mits that	t no fee is required for the consideration of this Information
		Disclo	sure St	atement.	
	Consid	leration	of the	listed refe	ferences and favorable action are solicited.
					Respectfully submitted,
		•			ROBERT A. YORK
					15/ 1 0
Dated:	Mav	5	2	004	By: Alichael W. J
2	2.24.)	-	, –		Michael W. Farn, Reg. No. 41,015
					FENWICK & WEST LLP
					Silicon Valley Center 801 California Street
					Mountain View, CA 94041
					Tel: (650) 335-7823
					Fax: (650) 938-5200

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

he Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

	Substitute for f	orm 1449/	AVPTO	Complete if Known				
INEO	DRAKTION	l Die	CLOSURE	Application No.	10/765,578			
			PPLICANT	Filing Date	January 26, 2004			
SIAI	EMENI	ot Ar	PLICANT	First Named Inventor	Robert A. York			
•				Art Unit	2811			
	•			Examiner Name	Not yet known			
Sheet	1	of	2	Attorney Docket Number	22994-08791			

	U.S. PATENT DOCUMENTS							
		Document No.		·				
Examiner Initials*	Cite No.1	Number – Kind Code² (if known)	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document				
		US-5,721,700	02-24-1998	Katoh				
		US-6,077,737	06-20-2000	Yang et al.				
		US-6,300,654 B1	10-09-2001	Corvasce et al.				
		US-6,383,858 B1	05-07-2002	Gupta et al.				
		US-6,432,794 B1	08-13-2002	Lou				
		US-6,452,776 B1	09-17-2002	Chakravorty				

			FOREIGN PATENT D	OCUMENTS	
		Foreign Patent Document			
Examiner Initials*	Cite No.1	Country Code ³ – Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T⁵

		OTHER REFERENCES – NON-PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	۳⁵
		Acikel, Baki et al., "A New High Performance Phase Shifter using (Ba _x Sr _{1-x} TiO ₃ Thin Films," <i>IEEE Microwave and Wireless Components Letters</i> , Vol. 12, No. 7, July 2002, pages 237-239.	
		Erker, ErichG. et al., "Monolithic Ka-Band Phase Shifter Using Voltage Tunable BaSrTiO3 Parallel Plate Capacitors," <i>IEEE Microwave and Guided Wave Letters</i> , Vol. 10, No. 1, January 2000, pages 10-12.	
		Liu, Yu et al., "BaSrTioO ₃ Interdigitated Capacitors for Distributed Phase Shifter Applications," <i>IEEE Microwave and Guided Wave Letters</i> , Vol. 10, No. 11, November 2000, pages 448-450.	
		Liu, Yu et al., "High-performance and Low-cost Distributed Phase Shifters Using Optimized BaSrTiO ₃ Interdigitated Capacitors," Electrical and Computer Engineering Dept., Materials Dept., University of California at Santa Barbara, Santa Barbara, CA 93106, 14 pages [online], [retrieved on 2003-06-24]. Retrieved from the Internet <url: http:="" my.ece.ucsb.edu="" publications="" pubs.htm="" yorklab="">.</url:>	

Examiner Signature	Date Considered	,
L		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

Complete if Known

Application No. 10/765,578

Filing Date January 26, 2004

First Named Inventor Replace A Verdage

 STATEMENT BY APPLICANT
 Filing Date
 January 26, 2004

 First Named Inventor
 Robert A. York

 Art Unit
 2811

 Examiner Name
 Not yet known

 Sheet
 2

 Attorney Docket Number
 22994-08791

xaminer	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine,	
Initials*	No.1	journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶
		Padmini, P. et al., "Realization of High Tunability Barium Strontium Titanate Thin Films by RF	
		Magnetron Sputtering," Applied Physics Letters, Vol. 75, November 1999, pages 3186-3188.	
		Serraiocco, J. et al., "Tunable Passive Integrated Circuits Using BST Thin Films," presented at	
		IFFF 2002, International Joint Conference on the Applications of Ferroelectrics, Kyoto, Japan,	
		May 2002, 10 pages [online], [retrieved on 2003-06-24]. Retrieved from the Internet <url:< td=""><td></td></url:<>	
		http://my.ece.ucsb.edu/yorklab/Publications/pubs.htm>.	
		Taylor, T.R. et al., "Impact of thermal strain on the dielectric constant of sputtered barium	ĺ
		strontium titanate thin films," Applied Physics Letters, Vol. 80, No. 11, 18 March 2002, pages	
		1978-80.	
		Taylor, T.R. et al., "Optimization of RF Sputtered Barium Strontium Titanate (BST) Thin Films for	
		High Tunability," presented at MRS Conference, Fall 1999, 2 pages [online], [retrieved on 2003-	
		06-24]. Retrieved from the Internet <url:< td=""><td> </td></url:<>	
		http://my.ece.ucsb.edu/yorklab/Publications/pubs.htm>.	ļ
		Taylor, T.R. et al., "RF Sputtered High Tunability Barium Strontium Titanate (BST) Thin Films for	
		High Frequency Applications," presented at ISIF 2000 Conference, Aachen, Germany, March	
		2000, 2 pages [online], [retrieved on 2003-06-24]. Retrieved from the Internet <url:< td=""><td></td></url:<>	
		http://my.ece.ucsb.edu/yorklab/Publications/pubs.htm>.	<u> </u>
•		York, R. et al. "Microwave Integrated Circuits using Thin-Film BST," presented at ISAF	1
		Conference, Honolulu, Hawaii, July 21-August 2, 2000, 6 pages [online], [retrieved on 2003-06-	1
		24]. Retrieved from the Internet <url: http:="" my.ece.ucsb.edu="" publications="" pubs.htm="" yorklab="">.</url:>	ļ
		York, Robert A. et al., "Synthesis and Characterization of (Ba _x Sr _{1-x})Ti _{1+y} O _{3+z} Thin Films and	
		Integration into Microwave Varactors and Phase Shifters," Journal of Integrated Ferroelectrics,	
		Vol. 34, April 10, 2000, pages 177-188.	<u> </u>
		York, Robert A. et al., "Thin-Film Phase Shifters for Low-Cost Phased Arrays," presented at	
		Workshop on Affordability and Cost Reduction for Radar Systems, Huntsville, Alabama, April	
		2000 and at URSI Conference, Salt Lake City, Utah, July 2000, 10 pages [online], [retrieved on	
		2003-06-24]. Retrieved from the Internet <url:< td=""><td></td></url:<>	
		http://my.ece.ucsb.edu/yorklab/Publications/pubs.htm>.	

	 D-4-	
Examiner	Date	
Signature	Considered	
- Silveria		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.